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(54) METHOD FOR MANUFACTURING AROMATIC RING COMPOUND CONTAINING NITROGEN

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a useful method for manufacturing such an aromatic ring derivative containing nitrogen as a phthalazine derivative, a quinazoline derivative or the like which is useful as a cyclic GMP-phosphodiesterases inhibitor or the like.

SOLUTION: The method for manufacturing a compound (1e) indicated in formula (1e) (In the formula, R₂ is a 1-6C alkyl group, or the like. R₁ is a halogen atom, a cyano group or the like. R₃ is a 6-14C aryl 1-6C alkyl group which may have a substituent or the like. Y₂ and Z₂ are each independently a methine group substituted by a nitrogen atom or 4-hydroxypiperidine-1-yl group or the like), a salt thereof or their hydrates comprises using a compound (1b) indicated in formula (1b) (In the formula, R₂ is a 1-6C alkyl group or the like. R₁, R₃ are the same as defined before. Y and Z are each independently a methine group substituted by a nitrogen atom or a halogen atom) as a raw material or an intermediate.

